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**Western Area Power Administration**  
**June 8, 2005**  
**Mitigation Action Plan**  
**for the**  
**Spring Canyon Wind Project**

**Project Overview.** The Spring Canyon Wind Project (formerly known as the Peetz Table Wind Project) would be constructed on private land located east of Peetz, in Logan County, Colorado. Spring Canyon Energy LLC (SCE), a wholly owned affiliate of Invenergy, applied to Western Area Power Administration (Western) to interconnect a 130-megawatt (MW) wind power facility to Western's existing 230-kilovolt (kV) Sidney to North Yuma transmission line. Western is the lead Federal agency for compliance with *the National Environmental Policy Act of 1969* (NEPA) as amended. There are no cooperating agencies. In accordance with NEPA and DOE's NEPA Implementing Procedures (Part 1021), in June, 2005, Western approved the environmental assessment, *Spring Canyon Wind Project Logan County, Colorado formerly known as The Peetz Table Wind Project*" (DOE/EA-1521), in which potential impacts of the project on the quality of the human environment were analyzed.

Executing an interconnection agreement would be consistent with Western's mission, described above. The primary purpose of the Spring Canyon Wind Project is to provide wind-generated electricity from a site in Colorado to further the objectives of the President's National Energy Policy to diversify energy sources by making greater use of non-hydroelectric renewable sources such as wind power (National Energy Policy Development Group 2001) and to meet customer demand for inexpensive energy from renewable energy resources. The project also would meet the demand for renewable energy resources created by the recent successful ballot initiative in Colorado requiring utilities to generate 10% of the state's energy from renewable resources by 2015.

Under the Proposed Action, Western would execute an interconnection agreement to connect the wind project to Western's existing Sidney to North Yuma 230-kV transmission line (see Western [1991] for information regarding this transmission line). SCE would construct and operate a 130-MW wind energy facility on privately owned land on Peetz Table, east of Peetz, in Logan

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County, Colorado. Phase I would consist of about 60 MW to be constructed in 2005, pending successful completion of the environmental review process. The size and timing for the construction of subsequent phases is not known at this time, but the entire 130-MW project is evaluated in the EA. Although the project would have an installed capacity of 130-MW, it is expected to operate at about 38% capacity, so actual output would average about 49 MW. SCE has obtained or will obtain leases from private landowners to construct and operate the wind project. The project footprint (i.e., the area to be disturbed during construction and throughout 40-year life-of-project) would be limited to the areas immediately adjacent to turbines and access roads.

The wind project would consist of approximately 87 1.5-MW or 72 1.8-MW wind turbines and associated facilities. Phase I would consist of about 40 turbines. The wind turbine generators would be supported by 80-meter tubular towers. Towers and generators would be white. Support facilities would include step-up transformers, a substation, underground and overhead power collection and communication lines, roads, and an operation and maintenance (O&M) building.

**Mitigation Action Plan.** The DOE requirements for preparing a Mitigation Action Plan (MAP) are specified in 10 CFR 1021 (Section 331(b), National Environmental Policy Act Implementing Procedures). These regulations state that “In certain circumstances, as specified in &1021.322(b) (2), DOE shall also prepare a Mitigation Action Plan for commitments to mitigations that are essential to render the impacts of the proposed action not significant. The Mitigation Action Plan shall address all commitments to such necessary mitigations and explain how mitigation will be planned an implemented. The Mitigation Action Plan shall be prepared before the FONSI and shall be referenced therein.” This MAP addresses the construction, operation, and maintenance of a 130-MW wind energy facility on approximately 22,054 acres of privately owned land on Peetz Table, east of Peetz, in Logan County, Colorado.

Two distinct sets of mitigation measures were identified in the EA: 1) Western's Standard Construction, Operation, and Maintenance Practices, 2) SCE's Applicant-committed Mitigation Measures. The EA contains over 50 individual mitigation measures; however, only six are

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necessary to reduce potential impacts to less than significant. These are discussed below in the order they are presented in the EA and summarized in Table 1 (located at the end of this Plan).

**Avoiding the disturbance of important paleontological resources without appropriate scientific data recovery.** This potentially significant impact has been partially mitigated via pre-construction surveys that yielded no scientifically important fossils. To reduce the level of impact to less than significant, Western will also implement the following:

Any paleontological resource discovered by SCE or any person working on its behalf would be immediately reported to Western. SCE would suspend all operations within 100 ft of such discovery until written authorization to proceed is issued by Western. An evaluation of discovery would be made by Western to determine appropriate actions to prevent the loss of significant scientific values. SCE would be responsible for the cost of evaluation, and any decision as to proper mitigation measures would be made by Western after consulting with SCE.

Construction personnel would be instructed about the types of fossils that may be encountered and the steps to take if fossils are discovered during construction. Instruction would stress the nonrenewable nature of paleontologic resources and that fossils are part of Colorado's prehistoric heritage and should be preserved for study.

This mitigation will be implemented by SCE and its construction contractors throughout the construction period. Western will be provided with a report of findings within 6 months after the evaluation of the discovery.

**Ensuring that construction or operation does not result in the invasion of non-native weedy species.** Noxious weeds would be mechanically controlled in all surface-disturbed areas. If herbicides are needed to control weeds, they would be applied by a licensed contractor. Equipment would be washed at a commercial facility prior to construction and on-site during construction if weeds are encountered in the project area.

This mitigation will be implemented by SCE, its construction contractors, and its operations and

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maintenance personnel throughout the construction period and then for the life-of-project. All weed control activities will be documented by SCE, and an annual weed control report will be provided to Western.

**Avoiding disturbance of an active raptor nest.** SCE has conducted raptor nest surveys of the entire project area and has identified 26 active raptor nests within the project area. If possible, SCE will time construction to avoid activities within specified buffers, to be determined in consultation with Western until after the young have fledged. If construction must occur within the specified protection zone for a given nest, Western will prescribe additional mitigation (e.g., screening the nest from construction activity, monitoring the nest during construction) to protect the nest from disturbance, to be determined on a case-by-case basis.

This mitigation will be implemented by SCE and its environmental contractor. A raptor nest report, including a description of case-by-case mitigation for active nests, will be provided to Western by December 31 in each year that construction occurs.

**Avoiding disturbance of any cultural resource site eligible for the NRHP.** If a previously undiscovered site or Traditional Cultural Property is exposed and discovered during construction, all activity would be halted. The site would be inspected and evaluated by Western to determine if the site is eligible for the NRHP and the treatments necessary--in consultation with SCE and the SHPO--to avoid further impacting the site. This standard approach to handling unanticipated cultural resource discoveries within the project area would ensure that impacts to cultural resources due to the proposed project would not be significant.

This mitigation will be implemented by SCE and its construction and environmental contractors during construction. Western will be provided with a report of findings for any unanticipated discovery within six months after treatment.

**Preventing loss of life, limb or property due to fires.** All fires would be extinguished immediately by SCE personnel, if there is no danger to life or limb, and the appropriate landowner and the county sheriff's department would be notified immediately. Some fire-

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fighting equipment would be located in vehicles and in the O&M facility. If the fire cannot be extinguished by SCE personnel, the landowner and sheriff would be so advised. Fire deterrents within the wind farm would include access roads, which may serve as fire breaks and regular clearing of vegetation from areas around transformers, riser poles, and buildings.

This mitigation will be implemented by SCE, its construction contractors, and its operations and maintenance personnel. Annual reports describing any fires and fire suppression activities will be provided to Western.

**Ensuring that the project's operation does not result in regular annoyance to the area's residents.** Use of new turbine technologies and incorporating a setback from residences will avoid regular annoyance to the area's residents. SCE will use state-of-the-art turbines that have been designed to minimize noise levels (e.g., upwind rotors, thinner blade tips, streamlined towers and nacelles). Turbines will be placed approximately 1000 ft from residences, so that turbine noise at residences will be in the range of ambient noise levels.

This mitigation has already been implemented by SCE.

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Table 1. Summary of Mitigation Action Plan.

Mitigation Commitment	Responsible Party	Action	Duration and Reporting Requirements
Avoiding the disturbance of important paleontological resources without appropriate scientific data recovery.	SCE and its construction contractors	This potentially significant impact has been partially mitigated via pre-construction surveys that yielded no scientifically important fossils. To reduce the level of impact to less than significant, Western will also implement the following: Any paleontological resource discovered by SCE or any person working on its behalf would be immediately reported to Western. SCE would suspend all operations within 100 ft of such discovery until written authorization to proceed is issued by Western. An evaluation of the discovery would be made by Western to determine appropriate actions to prevent the loss of significant scientific values. SCE would be responsible for the cost of evaluation, and any decision as to proper mitigation measures would be made by Western after consulting with SCE.	Throughout the construction period. Western will be provided with a report of findings within 6 months after the evaluation of the discovery.
Ensuring that construction or operation does not result in the invasion of non-native weedy species	SCE, its construction contractors, and its operations and maintenance personnel	Noxious weeds would be mechanically controlled in all surface-disturbed areas. If herbicides are needed to control weeds, they would be applied by a licensed contractor. Equipment would be washed at a commercial facility prior to construction and on-site during construction if weeds are encountered in the project area.	Throughout the construction period and then for the life-of-project. All weed control activities will be documented by SCE, and an annual weed control report will be provided to Western.
Avoiding disturbance of an active raptor nest.	SCE and its environmental contractor.	SCE has conducted raptor nest surveys of the entire project area and has identified 26 active raptor nests within the project area. If possible, SCE will time construction to avoid activities within specified buffers, to be determined in consultation with Western until after the young have fledged. If construction must occur within the specified protection zone for a given nest, Western will prescribe additional mitigation (e.g., screening the nest from construction activity, monitoring the nest during construction) to protect the nest from disturbance, to be determined on a case-by-case basis.	A raptor nest report, including a description of case-by-case mitigation for active nests, will be provided to Western by December 31 in each year that construction occurs.
Avoiding disturbance of any cultural resource site eligible for the NRHP.	SCE and its construction and environmental contractors	If a previously undiscovered site or Traditional Cultural Property is exposed and discovered during construction, all activity would be halted. The site would be inspected and evaluated by Western to determine if the site is eligible for the NRHP and the treatments necessary--in consultation with SCE and the SHPO--to avoid further impacting the site. This standard approach to handling unanticipated cultural resource discoveries within the project area would ensure that impacts to cultural resources due to the proposed project would not be significant.	Throughout construction. Western will be provided with a report of findings for any unanticipated discovery within six months after treatment.

Table 1 (Continued)

Mitigation Commitment	Responsible Party	Action	Duration and Reporting Requirements
Preventing loss of life, limb or property due to fires.	SCE, its construction contractors, and its operations and maintenance personnel.	All fires would be extinguished immediately by SCE personnel, if there is no danger to life or limb, and the appropriate landowner and the county sheriff's department would be notified immediately. Some fire-fighting equipment would be located in vehicles and in the O&M facility. If the fire cannot be extinguished by SCE personnel, the landowner and sheriff would be so advised. Fire deterrents within the wind farm would include access roads, which may serve as fire breaks and regular clearing of vegetation from areas around transformers, riser poles, and buildings.	Throughout construction, operations, and maintenance. Annual reports describing any fires and fire suppression activities will be provided to Western.
Ensuring that the project's operation does not result in regular annoyance to the area's residents.	SCE	Use of new turbine technologies and incorporating a setback from residences will avoid regular annoyance to the area's residents. SCE will use state-of-the-art turbines that have been designed to minimize noise levels (e.g., upwind rotors, thinner blade tips, streamlined towers and nacelles). Turbines will be placed approximately 1000 ft from residences, so that turbine noise at residences will be in the range of ambient noise level.	Complete